



Connecticut's Combined Heat and Power Initiative

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Background

- ❖ SW CT: 52 towns, 50% of state's load, growth 3-4%/yr, dense load
- ❖ Concentrated corporate presence: GE, IBM, Swiss Re, Pitney Bowes, etc HQ
- ❖ Strong quality of life
- ❖ Severe ozone non-attainment, PM2.5 non-attainment
- ❖ Strong congruence between days w/ poor AQ and days with peak MW
- ❖ Electric congestion charges: \$100-300 million/yr



Pre-2001 Approaches

- ❖ Diesel generators satisfy peak demand
- ❖ 1950s vintage oil plants provide spinning reserve
- ❖ Both aggravate air quality problem
- ❖ Collision between ISO/ energy strategies and air quality planning



Short-term Solutions

- ❖ Raise issues to ISO attention
- ❖ Developed distributed generation general permit
- ❖ Work with DOE, EPA, GETF: “summer savers award”
- ❖ Refocus state SBC funds



Long-term Solutions

- ❖ NEDRI policy recommendations
- ❖ ISO DR program opens door to DG
- ❖ RAP DG collaborative: model rule
- ❖ CT climate change action plan
- ❖ CT DEP section 42 DG/CHP rule
- ❖ Maximum achievable potential study for EE
- ❖ Retrocommissioning
- ❖ PA 05-1: Energy Independence Act
- ❖ Update building codes and new appliance standards



Solution Highlights

- ❖ DEP section 42: RAP DR rule as template, output-based, permit by rule. OK to operate in ISO DR and price response programs. Def. of “emergency” changed.
- ❖ Climate change action plan: CHP one of “top 10” for GHG reductions
- ❖ PA 05-1: CHP as class 3 to satisfy state RPS [up to 4% by 2013]
- ❖ 8 MM ft² benchmarked in Stamford area. Retrocommissioning now under way



TBD/ Opportunities

- ❖ Interconnection rules: still sorting out to remove barriers.
- ❖ Training needed for state permit engineers, esp. on BACT equivalency
- ❖ Need to work with ISO to value all MWh equally
- ❖ Impact of LICAP



For More Information

- ❖ PA 05-1: www.cga.ct.gov then, search for either PA05-1 or bill 7501
- ❖ DEP section 42: www.dep.state.ct.us then, click on “protecting our environment”, then “Bureau of Air Management”, then “regulations”, then “abatement of air pollution regulations”, then scroll down to “22a-174-42”
- ❖ NEDRI/ MADRI: www.raponline.org, then search under “New England Demand Response Initiative” or “Mid Atlantic Demand Response..”
- ❖ chris.james@po.state.ct.us